

ABSTRACT OF THE DISCLOSURE

The present invention relates to methods of profiling candidate genes as risk factors for attention deficit hyperactivity disorder, oppositional defiant disorder and conduct disorder. In one embodiment, the invention relates to a method of determining a genetic predisposition of a subject to ADHD, comprising detecting at least one allele from the group comprising the *TPH*, *PNMT*, *ADOA2A*, *NOS3*, and *NAT1* genes. By focusing on the additive effect of multiple genes and on the cumulative effect of functionally related groups of genes, a powerful approach is provided for the dissection of the genetic basis of ADHD, ODD and CD.